



MENSTRUAL HYGIENE PRACTICES AND ITS ASSOCIATION WITH MENSTRUAL PROBLEM AND REPRODUCTIVE TRACT INFECTION AMONG WOMEN IN MAHARASHTRA: RESULTS FROM A DISTRICT LEVEL HOUSEHOLD SURVEY

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ABSTRACT

Inadequate Menstrual hygiene management among women is a public health problem in India. Women in Maharashtra face barriers to achieving adequate menstrual hygiene. Hence, the papers focus on the variation in the menstrual hygiene practices and its association with RTI among women in Maharashtra. District Level Household and Facility Survey data (DLHS 3 & 4 India) use in the present study. Bivariate and logistic techniques conducted using IBM SPSS statistics 20. Results show that factors such as, age, educational status, work status, and residence determined for proper menstrual hygiene practices. The study result shows association between unclean old clothes and RTIs among women in Maharashtra. The high prevalence of RTIs and poor menstrual hygiene, suggest scope for intervention through health education programmed among women. The consequences are invisible health concerns that need to be addressed immediately in the form of health education aimed at women.

KEYWORDS: Menstrual hygiene, Practices, Restriction, Reproductive tract infection, Women, Maharashtra.

INTRODUCTION:

Women and girls in India face a multitude of barriers to safe menstrual hygiene management (MHM) (Kuhlmann AS, Henry K, Wall LL. 2017). Menstruation still considers cultural taboos, it is a matter kept out from public talks (Harshad Thakur, Annette Aronsson, et al. 2014). In India, there nearly 300 million women in the reproductive age group, and do not use hygienic methods. Reproductive Tract Infection (RTI), which has become a silent epidemic that destroys women's lives are close interrelated to poor menstrual hygiene. Unclean rags and old clothes increase the chances of RTIs infection. Studies have shown the associations between menstrual unhygienic practices and the development of RTIs (S Sangeetha Balamurugan, et al. 2014; McCathie, R. 2006). Studies showed that woman in Maharashtra, lack knowledge of menstrual hygiene-related practice. Unimproved methods of menstrual practices correlate with symptoms of RTIs such as itching of the vulva, pain during urination, and vaginal discharge (Deshpande TN, Patil SS, et al. 2018). Therefore, this study aims to examine the variation in the menstrual hygiene practices and assess its association with menstrual problems (Reproductive Tract Infection (RTI)) among women in Maharashtra. It is crucial to study the current practices about the same so that future interventions can be plan accordingly

DATA AND METHODS:

In this study District Level Household survey (DLHS-3&4) are used to look at the change in menstrual hygiene practices among women in 2007- 2008 to 2012-2013 time period in Maharashtra along with DLHS 4 round is used to understand the menstrual hygiene practices and menstrual problems in Maharashtra. DLHS 3 collected data from 35 districts, 37,716 households from Maharashtra during 2007-08 among 34,920 ever-married women aged 15-49 years. In addition, 7,536 unmarried women aged 15-24 years were interviewed. In this study, various demographic, social as well as economic variables such as age, age at marriage, education of husband and women, place of residences, duration of the marriage, age at 1st birth, marital status, and standard of living and media awareness regarding RTI and region of Maharashtra. Independent variable and dependent variables are considered as Methods using to prevent bloodstains during menstruation and symptoms of RTI and menstrual problems.

RESULTS:

Table 1 depicts the prevalence and change in menstruation hygiene practice and its association with the demographic and socio-economic characteristics of women in Maharashtra during 2007-008 to 2012-2013. Age is an important factor in influencing the choice of menstruation practices. Younger women were more likely to use improved methods than older women (see Table 1). Data results show that the percentage of women using the sanitary method found to be high in the younger age group, and it decreased with higher ages. In 20-29 age groups, it decreased from 8.4 % to 6% and 16.5% to 12.3% in the age group of 40-49. Place of residences has a significant association with menstruation hygiene practice. Data shows that the percentage of using sanitary method has increased in both rural (2.7% to 8.4%) and urban areas (18.4% to 23.3%) from the year 2007-08 to 2012-13 and the percentage of using cloth/locally prepared napkin/other method decreased in rural (94.6% to 86.6%) as well as urban (80.4% to 72.7%) in a year from 2007-08 to 2012-13. Study shows that those women hav-

ing no children, one and two children tend to more likely to use the sanitary method as compared to those having three and more children over the year of 2007-08 to 2012-13. Religious restrictions and cultures are a big barrier in the path of the menstrual hygiene management. It plays the most important role the knowledge and hygiene practice because of taboo and myths related to menstruation hygiene practices. Study shows that the percentage of using cloth/locally prepared napkin method has decreased in all religion. In Hindu, it decreased from 90.8% to 80.4%, Muslim 89.7% to 80%, Buddhist, and Neo Buddhist 89.8% to 79.8%, and other religions 72.8% to 66.5%. Education plays a key role in menstruation hygiene management. Education of both men and women regarding menstruation helps to overcome false beliefs and taboos. The present study shows that those women with higher education are mostly like to use sanitary method than cloth/locally prepared napkin because of awareness and knowledge about infection-related diseases. Table 1 shows that the percentage of women who had taken higher education are more using the sanitary method (Primary-1.7% to 7.5%, Secondary- 5.8% to 13.8% and above secondary- 26.8% to 32.1% as compared to illiterate-0.5% to 6.3% in 2007-08 to 2012). The use of sanitary methods increased with women's husband education (Illiterate-0.8% to 6.1%, primary education-1.6% to 7%, secondary education-5.8% to 12.5% and above secondary education 18.4% to 27.1%). The percentage of using cloth/locally prepared napkin decreased with husband education during the year 2007-08 to 2012-13. Study shows that working women as such Administrative, Executive and managerial Worker, Clerical, and Related worker/Sales Worker, and Professional, Technical, and Related Worker sector are more likely to use the sanitary method. The percentages of women are using the temporary method (24.3% to 27.3%) of contraception; they are more likely to use sanitary methods than permanent methods (4.2% to 12%) and traditional methods (18.1% to 24.9%) during the year 2007-08 to 2012-13. The percentage has decreased women are using the temporary method (74.7% to 71.7%) of contraception they are less use cloth/locally prepared napkin method than permanent method (93.1% to 83.6%) and traditional method (79.4% to 73.1%) during the year 2007-08 to 2012-13. Region wise data shows the percentage of using sanitary methods is high in the Kokan region than the Pune, Nasik, Nagpur, Amravati, and Aurangabad region in Maharashtra. Table 2 shows the association between menstrual hygiene practices and any symptoms of Reproductive tract infection (RTI). Those women are using sanitary method during menstruation are less likely to suffer the symptoms of RTI. The women suffering from itching or irritation over vulva and pain in the lower abdomen are those who use Cloth/Other methods (3.4%) and sanitary method users (2.7%) and not using any method (2.9%). Low backache is a common problem among women using Cloth/Other (9.3%), sanitary method users (8.9%), and not using any method (7.9%). Table 3 shows the association between menstrual hygiene practices and menstrual problems. The DLHS-4 data shows the prevalence of various menstrual problems with report to sanitary method, cloth/locally prepared napkin and nothing. Those women are using sanitary method during menstruation are less likely suffer the menstrual problems. The woman who uses who use Cloth/Other method (4.4%) or not using any method (1.2%) suffers from painful periods. An irregular period is a common problem of women, reported by women using old cloths (3.2%), not using any method (1.1%).

DISCUSSION:

Most of the studies have focused particularly only girls and/or adolescents leaving older women unstudied. The present study data are drawn from women aged 15-49 years old, which is a unique characteristic of the study. In addition, the data and population size were large enough to cover the women of all age groups that are enough for robust statistical analysis. There is a scarcity of study on women in areas of Maharashtra. The present study is an attempt to examine the variation in menstrual hygiene pattern of the women in Maharashtra by using the large-scale data. This study has investigated to fill this huge gap.

As it is evident from the above results shows that more women have access to proper menstruation hygiene practices in urban than in rural areas of Maharashtra. In both the rural and urban areas, the use of unhygienic and unimproved methods, especially the use of reuse cloth, is very common. These findings relate to other studies that show women from both area areas prefer cloth (Deo, D. and Ghattargi, C. 2005). Factors such as age, educational status, and other factors like work status, place of residence were factors for proper menstruation hygiene practices as established in the literature. Factors associated with appropriate proper menstruation hygiene practices are very similar to those found in other studies (Anand, E., Singh, J., Unisa, S., 2015). Age is an important factor in influencing the choice of menstruation practices (Omidwar S, Begum K, 2010). Among women 15 to 34 years old (8.4 % to 6%), improved methods were slightly more prevalent than for older women 40-49 years old (16.5% to 12.3%).

In India, religion plays an important role the present study shows that uses of sanitary methods were more prevalent among women who identified as Buddhist and other religions compared with women who identified as Hindu or Muslim. This is possible because Hinduism and Islam are two main religions in India consider menstruation 'impure' and impose many restrictions upon menstruation practices (Omidwar S, Begum K, 2010).

Women using improved methods were less likely to develop reproductive tract infections, which is consistent with findings from another study (Das et al., 2015). Not surprisingly, we found that the main factors affecting RTIs were, was poor menstrual hygiene practice among women. Previous studies often reported similar findings (Anand, E., Singh, J. and Unisa, S. 2015). Unclean rags and old clothes increase the chances of RTIs, including urinary, vaginal, and perineal infection (S Sangeetha Balamurugan, SS Shilpa1, et al. 2014).

CONCLUSION:

In the study, a variety of factors are known that are affected on menstrual behavior and practices, the most influential being demographic factor is the age of the women, education of women and place of residences. Awareness regarding the need about safe menstrual practices is very important in especially in women in the rural areas because menstrual hygiene is a very important risk factor for reproductive tract infection. Therefore, education on menstrual should be started from before learners reach menstrual periods, and it should connect to other skills-based health education that continues throughout adolescence. Hence trained school nurses/health personnel, motivated schoolteachers, and knowledgeable presents also play an important role in transmitting the vital message of correct menstrual hygiene. The high prevalence of symptoms of RTIs and their association with modifiable risk factors, such as personal and menstrual hygiene factors, suggest scope for intervention through health education programmed among women in preventing RTIs. Women who are re-using clothes without proper washing and drying are particularly prone to these problems. The consequences are invisible health concerns such as unnecessary hysterectomies, which needs to be addressed immediately in the form of health education aimed at women.

Acknowledgements:

We would like to thank International Institute for Population Sciences for allowing us to utilize DLHS data for our analysis. The data are available in the public domain and it has been taken from the International Institute for Population Sciences (IIPS) website [<http://www.iipsindia.ac.in/>]. Therefore, ethical clearance is not required for this study.

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Table 1: Prevalence and change of menstrual hygiene practices and its association with women demographic characteristics in Maharashtra during 2007-08 to 2012-13.

Background Characteristics	Nothing		Sanitary Method		Cloth/locally prepared napkin/other		DLHS3 34920	DLHS4 42814
	DLHS 3	DLHS 4	DLHS 3	DLHS 4	DLHS 3	DLHS 4		
Age								
15-19	1.2	5.3	4.8	15	94	79.7	2620	1395
20-29	1.5	3.5	8.4	16.8	90.1	79.7	12683	14327
30-39	2.7	2.4	7.5	16.5	89.8	81.1	11286	15035
40-49	3.6	8.9	6	12.3	90.3	78.8	4469	10448
Place of Residence								
Rural	2.6	5	2.7	8.4	94.6	86.6	21762	21672
Urban	1.2	4	18.4	23.3	80.4	72.7	9296	19534
Religion								
Hindu	2.4	4.6	6.8	15.1	90.8	80.4	25591	32362
Muslim	0.8	4.5	9.5	15.5	89.7	80	2794	5126
Buddhist/neo-Buddhist	2.5	4.5	7.8	15.7	89.8	79.8	2216	2909
Others	0.7	3.1	26.5	30.4	72.8	66.5	456	807
Caste								
Scheduled Caste	2.2	4.8	7.5	14	90.3	81.2	4762	7267
Scheduled Tribe	3.1	5.4	2.1	9.4	94.7	85.2	5786	5385
Other Backward Class	2.5	4.7	7.2	15.9	90.3	79.4	8590	16073
Others	1.6	3.6	10.1	17.8	88.3	78.6	11721	9324
Marital Status								
Currently married	2.1	4.4	7.6	15.7	90.3	79.9	29291	39129
Ever Married	3.5	6.5	4.8	11.1	91.7	82.5	1767	2077
Education status Women								
illiterate	3.8	6.3	0.5	6.3	95.7	87.4	3888	8299
primary	3	5.8	1.7	7.5	95.2	86.7	7367	6519
secondary	1.9	4	5.8	13.8	92.4	82.2	15007	16932
above secondary	0.8	3	26.8	32.1	72.4	64.9	4798	9454
Education status Husband								
Illiterate	3.6	6.3	0.8	6.1	95.7	87.6	5267	5582
Primary	3.3	6.2	1.6	7	95	86.8	5270	6180
Secondary	1.8	4.5	5.8	12.5	92.4	83	12710	16249
Above secondary	1.2	3.1	18.4	27.1	80.4	69.8	7811	13194
Type of Occupation								
1) Professional, Technical and Related Worker	1.2	3.4	33	43.8	65.8	52.8	643	655
2) Administrative, Executive and managerial Worker	7.7	2.3	34.6	44.2	57.7	53.5	26	43
3) Clerical and Related worker/ Sales Worker	0.8	2.7	22.4	24.5	76.7	72.8	490	767
4) Service worker	1.4	5.1	11.9	3.9	86.7	91.1	780	5770
5) Farmers, Fishermen, Hunters, loggers and Related Workers	3.2	4.7	0.9	8.3	95.9	87	15174	1551
6) Production Labors	2.5	3.1	5.4	18.2	92	78.8	2098	1371
Knowledge about RTI								
No	2.4	4.9	6	13.4	91.6	81.8	27453	33510
Yes	0.9	3.1	18.3	24.6	80.8	72.3	3605	7695
Maharashtra region								
Kokan	1.3	4.1	16	22.1	82.7	73.7	4563	5447
Pune	1.2	4	7.8	17.2	91	78.8	4286	6319
Nashik	2.4	4.4	7.3	11.3	90.2	84.3	4580	6593
Nagpur	3.5	5	6.3	18.1	90.1	77	5207	6565
Amravati	3.1	5.7	6.2	11.2	90.6	83.1	4590	5989
Aurangabad	1.8	4.2	3.6	14.4	94.6	81.4	7832	10293
Total	2.2	4.5	7.4	15.5	90.4	80.0	34920	42814

Table 2: Association between menstrual hygiene practices and any symptom of RTI in DLHS-4

Type of Methods	Itching or irritation over vulva.	Boils/ ulcers/warts around vulva	Pain in lower abdomen	Pain on urination	Swelling in the groin	Painful blister like lesions in and around vulva	Low backache	Pain during sexual intercourse	Spotting after sexual intercourse
Nothing	2.9	1.3	3.1	1.2	1.2	0.6	7.9	1	0.4
Sanitary Method	2.7	0.6	2.8	1.3	1.8	0.8	8.9	1.3	0.5
Cloth/ Other/ locally prepared napkin	3.4	1.2	4.4	1.7	1.7	0.8	9.3	1	0.6

Table 3: Association between Menstrual hygiene practices and Menstrual Problems in DLHS-4

Type of Methods	No periods	Painful periods	Frequent or short periods	Irregular periods	Prolonged bleeding	Scanty bleeding	Inter-menstrual bleeding	Blood clots/excessive bleeding
Nothing	1.4	1.2	1.0	1.1	0.3	0.6	0.2	0.1
Sanitary Method	0.8	3.7	1.1	3.0	1.5	0.7	0.3	0.5
Cloth/ Other/ locally prepared napkin	1.1	4.4	1.3	3.2	1.1	0.9	0.3	0.5